



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/715,391	11/19/2003	Teruaki Itoh	160-398	5497
23117	7590	11/24/2006	EXAMINER	
NIXON & VANDERHYE, PC 901 NORTH GLEBE ROAD, 11TH FLOOR ARLINGTON, VA 22203			GORDON, BRIAN R	
			ART UNIT	PAPER NUMBER
			1743	

DATE MAILED: 11/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/715,391

Applicant(s)

ITOH, TERUAKI

Examiner

Brian R. Gordon

Art Unit

1743

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 November 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 2 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-2 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

Drawings

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the convey means (as admitted not shown; page 5, line 23), stopping means (page 6) must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

Art Unit: 1743

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1-2 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The claims and specification fail to provide adequate descriptions or definition for the respective means in the claim. Applicant fails to state what specific structural elements are considered to make up each means and what one considers an equivalent thereof.

It is further unclear if applicant considers the respective containers, dispensing unit, and dispensing nozzle, as elements to the invention. The claims as presently drafted do not positively claim the elements.

As such, for the purpose of examination the claim is interpreted as requiring any element capable of conveying or transporting containers, an element capable of stopping the containers (or both conveying means and containers), and a device capable of aspirating and dispensing.

Claim 2 is not further limiting for it does not further limit the structure. It appears to be directed to a method step or how one intends for the device to be used.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

Art Unit: 1743

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1-2 are rejected under 35 U.S.C. 102(e) as being anticipated by Watson et al. US 6,599,476.

Watson et al. disclose pathology sample distribution system having a plurality of containers of different types and the containers each containing a sample for pathology analysis. The system comprises: primary container identification means; the identification means including a bar code scanner to scan bar coded labels and an image analyzer to analyze one or more characteristics of the container and/or the sample in therein; primary container cap removal and replacement means; hopper means having container alignment means for delivering secondary containers each with a closed end and an open end in a vertical position and with the open ends in position (stopped) to receive samples; sample aspiration and/or dispensing means for aspirating and/or dispensing volumetrically proportions of the samples from the primary container; blockage detection means for detecting blockage of flow in the sample aspiration means; secondary container sealing means; secondary container labeling means; secondary container storage means; container conveyance means; wherein in operation each primary container containing a sample is presented to the identification means and the container is accepted or rejected according to given criteria; the identification means being arranged to reject a container when it fails to detect the given

Art Unit: 1743

criteria and thereby indicating the presence of an error condition, when the given criteria are detected the cap of the primary container is removed and aliquots of the sample aspirated by the sample aspiration and/or dispensing means are dispensed to the secondary container or containers which are then sealed and labeled and placed in the storage means; and whereby the conveyance of the primary containers and secondary containers between operational steps is via the container conveyance means and the whole process is coordinated and controlled by a computerized laboratory information management system.

6. Claims 1-2 are rejected under 35 U.S.C. 102(e) as being anticipated by Kersco et al. 6,495,369.

Kersco et al. disclose the invention provides improved systems, devices, and methods for analyzing a large number of sample compounds contained in standard multi-well microtiter plates or other array structures. The multi-well plates travel along a conveyor system to a test station having a microfluidic device. At the test station, each plate is removed from the conveyor and the wells of the multi-well plate are sequentially aligned with an input port of the microfluidic device. After at least a portion of each sample has been input into the microfluidic channel system, the plate is returned to the conveyor system. Pre and/or post testing stations may be disposed along the conveyor system, and the use of an X-Y-Z robotic arm and novel plate support bracket allows each of the samples in the wells to be input into the microfluidic network through a probe affixed to a microfluidic chip (abstract).

Referring now to FIG. 10, the host PC will send a signal to the plate handling equipment to download a plate from input stack 16 to conveyor 14 (conveyor means). The host PC instructs bar code reader 22 to read the code as the plate passes by (or is held adjacent to) the bar code reader, and the bar code reader returns the read code to the host PC. This code will typically be logged into a data file for the run. In preparation for dilution, dispense head 30 (dispensing means) will aspirate the appropriate volumes of assay buffer from a buffer reservoir located below the deck of system 10. Pins (stopping means) can be used to hold plate 12 in position at dilution station 24, and the dispense head then deposits the assay buffer in the wells so as to reconstitute the samples.

7. Claims 1-2 are rejected under 35 U.S.C. 102(b) as being anticipated by Shaw US 5,576,214.

Shaw discloses a chemical analyzer. By way of example, the 1, 2 or 3 aspirators 50 (dispense means) preferably move, arrow 74, to an aspirate station 100 into which a tray 102 of tubes 104 bearing patient sample liquid is pushed, arrow 106, such tray for example being one of those described in U.S. Pat. No. 5,008,082. The aspirator is then lowered into one of the tubes 104 (that is stopped), and aspirates some liquid into the tip. It is then raised and moved further, arrows 110, to a dispense station 112. A plurality of slide test elements is then conveyed (conveyor means), arrow 116, into station 112, for example, 3 such elements E spaced apart on a pusher blade 114. The aspirator(s) are lowered into position above elements E and liquid is dispensed onto them. Blade 114 is then withdrawn, arrow 118, to a transfer station 120 at which another pusher

blade 122 is used to push a now-wetted element E off blade 114, arrow 124, into an incubator 126 which can feature a rotating rotor 128 (column 5, line 5).

8. Claims 1-2 are rejected under 35 U.S.C. 102(b) as being anticipated by Williams. US 3,985,508.

Williams disclose apparatus includes means comprising a delivery track (conveying means) for sequentially conveying specimen-bearing sample containers to a transfer apparatus which steps the sample containers past an aspirating apparatus (dispensing means). A return track conveys the track containers from the transfer apparatus after the aspirating means have automatically aspirated a plurality of test samples from the sample container. The test samples are subsequently released by the aspirating apparatus into corresponding reaction vessels. Means (stopping means) are also provided for transporting the reaction vessels in a closed loop between the aspirating apparatus and a determining station, all of the reaction vessels containing the test samples aspirated from a particular specimen being transported in rows from the aspirating apparatus to the determining station in parallel with the sample container from which the test samples were aspirated. Means for selectively adding predetermined amounts of selected reagents are controlled by other means comprising a plurality of switching devices adjacent the return track between the return track and the rows of reaction vessels being transported to the determining position. In particular, the switching devices are sequentially enabled by the sample cup being returned on the return track in parallel with the corresponding row of reaction vessels containing the test samples aspirated from the sample cup, and responsively, the

reagent dispensing means adds one or more reagents to selected reagent vessels in accordance with a pre-selected program (column 2, line 32).

The transfer means stopping at each aspirating apparatus while the test sample is aspirated from the sample container (claim 2).

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Veiner; Craig R.; Otto; Ralf et al.; Sakazume; Taku et al.; Mimura; Tomonori et al.; Ohishi; Tadashi et al.; Kadota; Toshimi et al.; Sasaki, Hiroshi et al.; Chiou; Chung-Fan et al.; Kowallis; Reid Burton; Kodama; Ryuichiro et al.; Ishihara; Narihito; Ashihara; Yoshihiro et al.; and Mawhirt; James A. et al. disclose devices including conveyors and dispensing elements.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian R. Gordon whose telephone number is 571-272-1258. The examiner can normally be reached on M-F, with 2nd and 4th F off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jill Warden can be reached on 571-272-1267. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1743

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



brg

BRIAN R. GORDON
PRIMARY EXAMINER